

5. (Amended) Linear peptide according to one of claim[s] 3 [to 4], characterised in that the X groups are chosen from among glycine, alanine, valine, norleucine, isoleucine, leucine, cysteine, cysteine^{Acm}, penicillamine, methionine, serine, threonine, asparagine, glutamine, phenylalanine, histidine, tryptophan, tyrosine, proline, Abu, carboxylic amino-1-cyclohexane acid, Aib, carboxylic 2-aminotetraline, 4-bromophenylalanine, tert-leucine, 4-chlorophenylalanine, β -cyclohexylalanine, 3, 4-dichlorophenylalanine, 4-fluorophenylalanine, homoleucine, β -homoleucine, homophenylalanine, 4-methylphenylalanine, 1-naphthylalanine, 2-naphthylalanine, 4-nitrophenylalanine, 3-nitrotyrosine, norvaline, phenylglycine, 3-pyridylalanine, [2-thienyl] alanine.

6. (Amended) Linear peptide according to any one of claim[s] 1 [to 5], characterised in that it meets one of the following formulas

RXXRXUXURRRXUXXXR-NH₂ (V)

RRXUXRXUXRXXUXRRUR-NH₂ (VI)

in which

- U represents serine or threonine,
- R represents arginine, and
- the X groups, identical or different, represent an amino acid which may or may not be natural, including D-amino acids, either aliphatic or aromatic, such as glycine, alanine, valine, norleucine, isoleucine, leucine, cysteine, cysteine^{Acm}, penicill amine, methionine, serine, threonine, asparagine, glutamine, phenylalanine, histidine, tryptophan, tyrosine, proline, Abu, carboxylic amino-1-cyclohexane acid, Aib, carboxylic 2-aminotetraline, 4-bromophenylalanine, tert-leucine, 4-chlorophenylalanine, β -cyclohexylalanine, 3, 4-dichlorophenylalanine, 4-fluorophenylalanine, homoleucine, β -homoleucine, homophenylalanine, 4-methylphenylalanine, 1-naphthylalanine, 2-naphthylalanine, 4-nitrophenylalanine, 3-nitrotyrosine, norvaline, phenylglycine, 3-pyridylalanine, [2-thienyl] alanine.

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7. (Amended) Linear peptide according to any one of claim[s] 1 [to 6], having the following sequences

RGGRLSYSRRRFSVSVGR,
RGVSVSFRRRSYSLRGGR,
EGGELSYSEEEFSVSVGE,
RGGRLAYRLLRFAIRVGR,
OGGOXXBOXXOBXXXOXG,
RAARLG YRXXRFGZRVGR,
YRRRFSVSVR,
RRLSYSRRRF,
RRLSYSRRRFSVSVR,
RGGRLSYSRRRFSTSTGR,

in which B represents Naphthylalanine, O represents Ornithine, X represents Norleucine and Z represents Norvaline.

8. (Amended) Linear peptide according to any one of claim[s] 1 [to 6], having the following sequences

KWSFRVSYRGISYRRSR,
RWSFRVSYRGISYRRSR,
RSRRYSIGRYSYRFSWK,
OBXBOXXBOGXOBXXOX,
KWA FRVAYRGIRYLLRL,
KYAWRVAHRGIRWLLRX

in which B represents Naphthylalanine, O represents Ornithine, X represents Norleucine and Z represents Norvaline.

10. (Amended) Use of a peptide according to any [one of claims 1 to 8] claim 1 to vector active substances in an organism.